

Notice of Allowability

Application No.

09/670,911

Applicant(s)

SOLDEN ET AL.

Examiner

Art Unit

Dwin M. Craig

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9-6-2005.
2. ☒ The allowed claim(s) is/are 2-17, 27 and 29-40.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DMC

DETAILED ACTION

And

EXAMINER'S REASONS FOR ALLOWANCE

1. Claims 2-17, 27 and 29-40 are allowed.
2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John W. Carpenter Registration Number 39,129 on 10-20-2005.

The application has been amended as follows:

In claim 17 please change "behaviors," to -- behaviors; --.

In claim 17 please change "items." to -- items, wherein the behavioral model is created. --.

In claim 27 please change "level model" to -- level computer implemented model --.

In claim 29 please change "A method" to -- A computer implemented method --.

In claim 32 please change "A method" to -- A computer implemented method --.

In claim 34 please change "A method" to -- A computer implemented method --.

In claim 35 please change "A method" to -- A computer implemented method --.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance: Applicants' claims are allowed for at least the following reasons.

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3.1 As regards independent claim 17, the following limitations, in combination with other limitations, are neither anticipated nor made obvious by the prior art, “*means for generating communications patterns between architectural components that require communication between them in order to perform user specified behaviors, each communications pattern including communication between any intervening architectural components needed to communicate between architectural components carrying out the behaviors;*” in combination with “*wherein the architectural components are high level architectural components and not component level design items.*” The Examiner notes the following in regards to the claim language of independent claim 17, the Applicants’ have invoked 35 USC § 112 6th paragraph and the Examiner notes that structural support for the, “*means for generating patterns*” is located in page 9, page 12 lines 7-11, 27-29 and page 13 lines 1-13 and figures 2 and 9. The Examiner further notes that a clear explanation of what types *communications patterns* are being captured and used is located on page 17 lines 15-19, page 18 lines 1-19, page 19 lines 3-27 and page 20 lines 7 & 8 and in figure 5. The combination of Applicants’ instant amendments to the claim language and persuasive arguments and further the structural support draw in from Applicants’ specification presented during prosecution has been, in combination, sufficient to over come the Examiner’s prior art rejections.

3.2 As regards independent claim 27, the following limitations, in combination with other limitations, are neither anticipated nor made obvious by the prior art, “*a first service that implements the application programming interface that models the performance of the communication protocol, the first service being among a plurality of services supported by the pattern to which the behavior communication is mapped;*” in combination with, “*recognize and*

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capture communications patterns among the architectural components that require communication among them in order to perform behaviors". The prior art fails to teach or suggest the capturing of different communications protocols between different components being modeled in a simulation of an electronic system composed of complex modules that use different and/or legacy communications protocols. This is expressly disclosed in Applicants' claim language, for example, "*capture a plurality of hardware and software architectural components being contained within an architectural platform*". Independent claim 27 is allowable at least for the reasons that have been discussed and further, the combination of Applicants' instant amendments and arguments presented during prosecution and arguments against the prior art references applied in rejections against Applicants' claims have been, in combination, sufficient to overcome the rejections made by the Examiner.

3.3 As regards independent claim 32 the following limitations, in combination with other limitations are neither anticipated nor made obvious by the prior art, "*mapping each instance of communications between behaviors to an instance of the captured pattern;*" and combination with "*wherein the architectural components are high level architectural components and not component level design items*". The Examiner notes that the prior art fails to teach the use of captured communications patterns at the behavioral level of abstraction. Independent claim 32 is allowable at least for the reasons that have been discussed and further, the combination of Applicants' instant amendments and arguments presented during prosecution and arguments against the prior art references applied in rejections against Applicants' claims have been, in combination, sufficient to overcome the rejections made by the Examiner.

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3.4 In regards to independent claim 34 the following limitations, in combination with other limitations, are neither anticipated nor made obvious by the prior art, *“mapping each instance of communication between behaviors to an instance of the captured pattern”* in combination with, *“wherein the communications patterns include each of timing, speed and protocols that are required to carry out communication between the separate architectural components.”*

Independent claim 34 is allowable at least for the reasons that have been discussed and further, the combination of Applicants' instant amendments and arguments presented during prosecution and arguments against the prior art references applied in rejections against Applicants' claims have been, in combination, sufficient to overcome the rejections made by the Examiner.

3.5 As regards independent claim 35 the prior art neither anticipates nor makes obvious the following limitations, in combination with other limitations, *“mapping each instance of communication between behaviors to an instance of the captured pattern;”* in combination with, *“wherein the step of mapping each instance of communications comprises mapping each instance of communication to a semaphore pattern that includes a sender and receiver pair of pattern services representing each end of the communication”*. Independent claim 35 is allowable at least for the reasons that have been discussed and further, the combination of Applicants' instant amendments and arguments presented during prosecution and arguments against the prior art references applied in rejections against Applicants' claims have been, in combination, sufficient to overcome the rejections made by the Examiner.

3.6 As regards dependent claims 2-16, 30, 31, 33 and 36-40 these claims are allowed because they depend upon an allowed base claim.

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3.7 Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

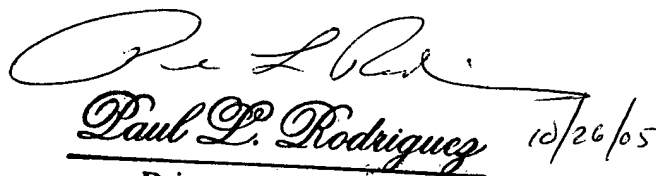
Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M. Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Paul L. Rodriguez 10/26/05
Primary Examiner
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